PATENT Reply under 37 CFR 1.116 EXPEDITED PROCEDURE Group 3731

## REMARKS

Claims 1-10 are pending in this application. Claims 1-10 are rejected. Claims 1 and 9 are amended hereby.

Responsive to the rejection of claims 1-10 at paragraphs 2-5 under 35 U.S.C. § 112, second paragraph, Applicant has amended claims 1 and 9 keeping in mind the comments of the Examiner. Applicant submits that claims 1-10 are in allowable form.

Applicant respectfully submits that the requested amendment to the claims, submitted after the Office Action designated as final, should be entered, in that the amended claims do not include any new issues requiring further search. The same structure is being claimed as in the amendment dated May 21, 2003, but in a form that relates the "convex segment" of the viewing window to other claimed structure of the reamer. The present amendment therefore raises no new issues requiring further search.

Responsive to the rejection of claims 1-10 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,690,634 (Muller et al.), Applicant respectfully traverses this rejection and submits that claims 1-10 are now in condition for allowance.

Muller et al. '634 disclose a medullary drill head (Figs. 1-4) including shell 6 having three openings 5 in the form of spirally shaped slots, placed 120° apart as shown in Fig. 2.

In contrast, claim 1, as amended, recites in part:

each said viewing window extending through said head, each said viewing window including an axis both extending through a corresponding said viewing window and orthogonal to said distal face, at least one said viewing window including at least one convex segment as viewed from a corresponding said axis, said at least one convex segment located on a perimeter of the corresponding said viewing window.

(Emphasis added.) Applicant submits that such an invention is neither taught, disclosed nor suggested by Muller et al. '634 or any of the other cited references, alone or in combination, and has distinct advantages thereover.

Figs. 2 and 3 of Muller et al. '634 show top views of a spiral slot. Fig. 4 of Muller et al. '634 clearly show that the slots have straight segments joined by concave segments. Muller et al. '634 fail to disclose or suggest each viewing window including an axis both extending through a corresponding viewing window and orthogonal to the distal face, at least one viewing window including at least one convex segment as viewed from a corresponding axis, at least one convex segment located on a perimeter of the corresponding viewing window; the slots of Muller et al. '634 only include straight or concave sections as viewed from an axis both through the opening and orthogonal to the shell as clearly shown in Fig. 4 of Muller et al. '634. The viewing windows of the present invention, including at least one convex segment located on a perimeter of the corresponding said viewing window disclosed by the drawings of the present invention, provide enhanced viewing over the prior art by providing additional viewing angles. The convex segments of the present invention bulge into the viewing windows (see Figs. 2 and 3 in the application as filed) and in use, as the reamer rotates and cuts, the convex segments will tend to shed cut biomatter and therefore maintain an open window. This provides an advantage over the prior art including Muller et al. '634, which only disclose straight or concave sections as viewed from an axis both through the opening and orthogonal to the shell, the straight or concave sections not shedding cut biomatter as efficiently as the present invention. Further, the convex segments of the present invention allow greater flexibility in the shape of the viewing windows when compared to the slots of the prior art. Yet further, the convex segments of the present invention allow the viewing windows to be contoured around cutting teeth having concave sections (see SMI0029.US

PATENT Reply under 37 CFR 1.116 EXPEDITED PROCEDURE Group 3731

again Figs. 2 and 3 in the application as originally file), thereby maximizing the viewing window aperture area while simultaneously maintaining the strength of the reamer by keeping sufficient material between the viewing windows and the cutting teeth.

Claim 9 has been amended similarly to claim 1. For all of the foregoing reasons,

Applicant submits that claim 1 and 9, and claims 2-8 and 10 depending therefrom, are now in

condition for allowance, which is hereby respectfully requested.

Responsive to the rejection of claims 1-10 under 35 U.S.C. § 103(a) as being obvious by U.S. Patent No. 6,102,915 (Bresler et al.), Applicant respectfully traverses this rejection and submits that claims 1-10 are now in condition for allowance.

Bresler et al. '915 disclose milling tool 2 (Figs. 1-3) including a hollow, substantially hemispherical dome 3, with sharp-edged openings 4 and open base 50 in which are provided elements for removably fixing milling tool support 1 (column 3, lines 31-34). Dome 3 also has additional openings, such as openings 21 and 22, of sufficiently large size to enable the user to check the contact between the bottom of the cotyloid cavity hollowed out by milling tool 2 and the hemispherical external surface of milling tool 2 fitted into the cavity (column 4, lines 12-17).

In contrast, claim 1, as amended, recites in part:

each said viewing window extending through said head, <u>each said viewing window</u> including an axis both extending through a corresponding said viewing window and orthogonal to said distal face, at least one said viewing window including at least one convex segment as viewed from a corresponding said axis, said at least one convex segment located on a perimeter of the corresponding said viewing window.

(Emphasis added.) Applicant submits that such an invention is neither taught, disclosed nor suggested by Bresler et al. '915 or any of the other cited references, alone or in combination, and has distinct advantages thereover.

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Bresler et al. '915 disclose a reamer with openings of sufficiently large size to enable the user to check the contact between the bottom of the cotyloid cavity hollowed out by the milling tool and the hemispherical external surface of the milling tool fitted into the cavity. However, Bresler et al. '915 fails to disclose or suggest each viewing window including an axis both extending through a corresponding viewing window and orthogonal to the distal face, at least one viewing window including at least one convex segment as viewed from a corresponding axis, at least one convex segment located on a perimeter of the corresponding viewing window; the openings of Bresler et al. '915 only include straight or concave sections as viewed from an axis both through the opening and orthogonal to the dome.

The Examiner alleges that it would have been an obvious matter of design choice to change the shape of the window of Bresler et al. '915 since such a modification would not have changed the function of the device. Such an allegation is not supported by the Manual of Patent Examining Procedure which states a prior art device can perform all the functions of the apparatus claim and still not anticipate the claim (MPEP 2114), and further, all claim limitations must be taught or suggested in order to establish a prima facie case of obviousness (MPEP 2143.03). The Examiner has failed to establish a prima facie case of obviousness in that the claim limitations of "each said viewing window including an axis both extending through a corresponding said viewing window and orthogonal to said distal face, at least one said viewing window including at least one convex segment as viewed from a corresponding said axis, said at least one convex segment located on a perimeter of the corresponding said viewing window" is neither taught nor suggested by the cited references.

Yet further, changes in shape are not a matter of obvious design choice when there is

persuasive evidence that the particular configuration is significant (MPEP 2144.04 IV B and In re

SMI0029.US

PATENT Reply under 37 CFR 1.116 EXPEDITED PROCEDURE Group 3731

Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)). Such persuasive evidence includes the viewing windows of the present invention, with an axis both extending through a corresponding viewing window and orthogonal to the distal face, at least one viewing window including at least one convex segment as viewed from a corresponding axis, at least one convex segment located on a perimeter of the corresponding viewing window as disclosed by the drawings of the present invention, provide enhanced viewing over the prior art by providing additional viewing angles. The convex segments of the present invention bulge into the viewing windows (see Figs. 2 and 3 in the application as filed) and in use, as the reamer rotates and cuts, the convex segments will tend to shed cut biomatter and therefore maintain an open window. This provides an advantage over the prior art including Bresler et al. '915, which only disclose straight or concave sections as viewed from an axis both through the opening and orthogonal to the dome, the straight or concave sections not shedding cut biomatter as efficiently as the present invention. Further, the convex segments of the present invention allow greater flexibility in the shape of the viewing windows when compared to the openings of the prior art. Yet further, the convex segments of the present invention allow the viewing windows to be contoured around cutting teeth having concave sections (see again Figs. 2 and 3), thereby maximizing the viewing window aperture area while simultaneously maintaining the strength of the reamer by keeping sufficient material between the viewing windows and the cutting teeth.

Claim 9 has been amended similarly to claim 1. For all of the foregoing reasons,

Applicant submits that claim 1 and 9, and claims 2-8 and 10 depending therefrom, are now in

condition for allowance, which is hereby respectfully requested.

It is further submitted that the requested amendment to the claims, submitted after the Office Action designated as final, should be entered, and that the amendment would place all SMI0029.US

remaining claims in condition for allowance. Further, the requested amendments to the claims simplify the issues for a potential appeal by reducing the number of claims under consideration and clarifying the claimed structure.

For the foregoing reasons, Applicant submits that the pending claims are definite and do particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Moreover, Applicant submits that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicant respectfully requests withdrawal of all rejections and allowance of the claims.

In the event Applicant has overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicant hereby conditionally petitions therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

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PAGE 13

PATENT Reply under 37 CFR 1.116 EXPEDITED PROCEDURE

Group 3731

Should any question concerning any of the foregoing arise, the Examiner is invited to

telephone the undersigned at (260) 897-3400.

Respectfully submitted,

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CERTIFICATE OF MAILING

Thereby certify that this correspondence is being transmitted via facsimile to the U.S. Patent and Trademark Office, on: <u>December 9, 2003</u>.

Stephen D. Horchem, Reg. No. 53,035

Name of Registered Representative

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December 9, 2003

Date

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